RD28106-1

IN THE CLAIMS

1 - 10. (Cancelled)

11. (Currently Amended) A continuous film extrusion process for producing a transparent or translucent thermoplastic film for optical media applications having a low birefringence, low stress and wherein at least one surface of the film has a roughness of less than about 4 microinches and a retardation value of less than about 100 nanometers, which process comprises: ~~the steps of~~

extruding a molten thermoplastic film, and

passing the molten thermoplastic film through an opening between two opposing calendaring rolls wherein at least one calendaring roll is a finishing roll and subsequently cooling the hot thermoplastic film to a temperature below its solidification temperature of the thermoplastic film, said finishing roll is a multi component structure comprised of an inner steel shell, an intermediate resilient covering over the inner steel and a ~~metal~~ multi-layer metal sleeve outer covering comprised of at least two layers.

12. (Original) The process of claim 11, wherein the cooled thermoplastic film has a thickness of about 0.001 to about 0.060 inches.

13. (Original) The process of claim 11 wherein at least one surface of the thermoplastic film has a roughness of about 0.5 to about 2.0 microinches.

14. (Cancelled)

15. (Original) The process of claim 11 wherein the 2 opposing calendaring rolls are finishing rolls used to produce a thermoplastic film of low birefringence, low stress and wherein both surfaces of the thermoplastic film have a roughness of less than about 4 microinches.

16. (Original) The process of claim 15 wherein both surfaces of the thermoplastic film have a roughness of about 0.5 to about 2.0 microinches.

17. (Withdrawn) The finishing roll of claim 11 wherein the structure comprises an inner metal shell and an outer multi layer metal sleeve of at least two layers and having interdisposed there between an intermediate resilient cover over said inner metal shell.

18. (Withdrawn) The finishing roll of claim 17, wherein the intermediate resilient cover has sufficient resiliency to allow for deformation of the surface of the outer multi-layer metal sleeve in order to reduce flow induced stress in the thermoplastic film, said resilient cover having a hardness of about 50 to about 150 durometers.

19. (Withdrawn) The finishing roll of claim 17 wherein the outer multi-layer metal sleeve is capable of flexing to match the intermediate resilient cover.

20. (Withdrawn) The finishing roll of claim 17, wherein the outer layer of the multi-layer metal sleeve is capable of being polished to a surface roughness of less than about 4 microinches and is capable of flexing without failing.

21. (Withdrawn) The finishing roll of claim 17, wherein the inner layer of the multi-layer outer metal sleeve is comprised of nickel.

22. (Withdrawn) The finishing roll of claim 17, wherein the outer metal layer of the multi-layer outer metal sleeve is comprised of chrome.

23. (Withdrawn) The finishing roll of claim 17 wherein the multi-layer outer metal sleeve is comprised of 3 layers.

24. (Withdrawn) The finishing roll of claim 23 wherein the 3 layer outer metal sleeve is comprised of an inner layer comprised of nickel, an intermediate layer comprised of copper and an outer layer comprised of chrome.

25. (New) The process of claim 11 wherein the multi-layer metal sleeve outer covering has a total thickness of about 0.005 inches to about 0.020 inches.

26. (New) The process of claim 11 wherein the multi-layer metal sleeve outer covering further comprises three-layers with a chrome outer layer having a thickness of about 0.0002 inches to about 0.002 inches.

27. (New) The process of claim 26 wherein the multi-layer metal sleeve outer covering further comprises an inner layer having a thickness of about 0.002 inches to about 0.010 inches and comprising a material selected from the group of nickel and a nickel based alloy.

28. (New) The process of claim 27 wherein the multi-layer metal sleeve outer covering further comprises a middle layer disposed between the outer layer and the inner layer, and wherein the middle layer comprises copper and has a thickness of about 0.005 inches to about 0.020 inches.

29. (New) A continuous film extrusion process for producing a thermoplastic film having low stress and wherein at least one surface of the film has a roughness of less than about 4 microinches, which process comprises:

extruding a molten thermoplastic film, and

passing the molten thermoplastic film through an opening between two opposing calendaring rolls wherein at least one calendaring roll is a finishing roll and subsequently cooling the hot thermoplastic film to a temperature below its solidification temperature of the thermoplastic film, said finishing roll is a multi component structure comprised of an inner steel shell, an intermediate resilient covering over the inner steel and a multi-layer metal sleeve outer covering comprised of at least two layers.

30. (New) The process of claim 29, wherein the cooled thermoplastic film has a thickness of about 0.001 to about 0.060 inches.

31. (New) The process of claim 29, wherein at least one surface of the thermoplastic film has a roughness of about 0.5 to about 2.0 microinches.